

WHAT IS CLAIMED IS:

- Sub A57
1. A flow rate measuring device comprising:
a sub-passage¹⁸ installed in [a main¹⁹ passage]¹⁷
through which a fluid flows; and
a detection element installed in the sub-
passage and capable of measuring a flow rate of a gas
flowing in a forward direction and a flow rate of a gas
flowing in a backward direction;
wherein the sub-passage has an outlet opening
in a radial direction of the main passage and a bent
portion at least upstream of the detection element;
wherein a means²² is provided near the outlet
of the sub-passage to introduce the backward flow of
the main passage into the sub-passage through the
outlet.
 2. A flow rate measuring device according to
claim 1, wherein the introduction means introduces the
backward flow into the sub-passage through the outlet
by a dynamic pressure generated by the backward flow.
 3. A flow rate measuring device according to
claim 1, wherein the sub-passage has the bent portion
between the outlet and the detection element.
 4. A flow rate measuring device according to
claim 2, wherein the introducing means is a stepped
portion whose side surface downstream of the outlet in
the backward direction is set higher than ^{L40} its side
surface upstream of the outlet in the backward
direction.
- Sub Ab7

5. A flow rate measuring device according to claim 4, wherein the introducing means is constructed to facilitate the introduction of the backward flow more than the forward flow.

6. A flow rate measuring device according to claim 5, wherein the introducing means blocks the forward flow from entering into the sub-passage through the outlet.

7. A flow rate measuring device according to claim 6, wherein the sub-passage is constructed of at least two members and the introducing means is formed on only one of the two members.

8. A flow rate measuring device according to claim 6, wherein the introducing means is formed in the main passage.

9. A flow rate measuring device according to claim 8, wherein a length of a part of the sub-passage from an inlet of the sub-passage to the detection element is almost equal to a length of another part of the sub-passage from the detection element to the outlet of the sub-passage.

10. A flow rate measuring device according to claim 9, wherein the outlet is formed at two locations, the detection element is formed on one surface of a substrate, and the introducing means is provided only near the outlet that is formed on the same side as the one surface of the substrate.

11. An internal combustion engine control system

*A combustor cannot
depend from a sub-
comb. chn. Also
claim 11 alternative
form.*

comprising:

an internal combustion engine;

a flow rate measuring device claimed in any one of claims 1-9 and installed in an intake manifold of the internal combustion engine;

a fuel supply device to supply fuel to the internal combustion engine; and

a controller to control the fuel supply device based on a signal from the flow rate measuring device.

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